MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 1, 2018/2019

DCS5288 – INTERNET AND WEB PUBLISHING

(All IT Groups)

20 OCTOBER 2018
2.30 p.m. – 4.30 p.m.
(2 Hours)

INSTRUCTIONS TO STUDENT:

1. This question paper consists of 12 pages with 2 sections.
2. **SECTION A**: Answer **ALL** Multiple Choice Questions on the OMR sheet given.
3. **SECTION B**: Answer **ALL** Structured Questions in the Answer Booklet provided.

SECTION A (20 Marks)

Instruction: *Answer **ALL** questions from this section and shade your answers on the OMR sheet provided.*

1. There are two ways of sending data which are circuit switching and packet switching. Which of the following best explains about packet switching?
   A. Mode of data transmission which message sent together over route that is optimum for each packet.
   B. Mode of data transmission which message is broken down into number of parts and sent independently over route that is optimum for each packet and reassemble at the destination.
   C. Mode of data transmission which message is broken down into number of parts following a route that is optimum for the packets and reassemble at the destination.
   D. None of the above

2. WWW is derived from which model?
   A. File server model
   B. Local server model
   C. Client server model
   D. Peer-to-peer model

3. ISP exchanges internet traffic between their networks by
   A. Subscriber end point
   B. Internet exchange point
   C. ISP end point
   D. Internet transmission point

4. IPv6 addressed has a size of
   A. 265 bits
   B. 128 bits
   C. 64 bits
   D. 32 bits

5. What is the function of markup tags?
   A. Tells web browser how to duplicate page
   B. Tells web browser how to organise page
   C. Tells web browser how to display the page
   D. None of the above.

6. Which tag is used to add new row?
   A. `<tr> and </tr>`
   B. `<td> and </td>`
   C. `<p> and </p>`
   D. `<th> and </th>`

7. What is the HTML tag to open a browser in a new tab?
   A. `<a href="url" new>`
   B. `<a href="url" target="_blank">`
   C. `<a href="url" target="new">`
   D. `<a href="url" target="">`

Continued...

8. Which of the following HTML statement will display the output as shown below?

- I
- Love
- Web Development

A.
```
<ul type="square">
<li>I</li><li>Love</li><li>Web Development</li>
</ul>
```

B.
```
<ol style="square">
<li>I</li><li>Love</li><li>Web Development</li>
</ol>
```

C.
```
<ul style="square">
<li>I</li><li>Love</li><li>Web Development</li>
</ul>
```

D.
```
<ol type="square">
<li>I</li><li>Love</li><li>Web Development</li>
</ol>
```

9. Which of the following is the CSS selector that allows you to target every element in a web page?

A. @
B. *
C. #
D. . (period)

10. Which of the following is(are) the valid values for the font-style CSS property?

I. Italic
II. Oblique
III. Normal
IV. Inherit

A. II
B. II & III
C. I, II, III
D. All of the above

11. There are 3 types of CSS style sheet which are internal, external and inline. What is the correct HTML for referring to an external style sheet?

A. `<stylesheet>mystyle.css</stylesheet />`
B. `<style src= "mystyle.css" />`
C. `<link rel= "stylesheet" type= "text/css" href= "mystyle.css">`
D. `<link src= "stylesheet" type= "text/css" rel= "mystyle.css">`

12. Which of the following property of a table element specifies the width that should appear between table cells?

A. border-collapse
B. border-width
C. border-spacing
D. border-style

Continued...

13. Which of the following is **FALSE** about the variables in JavaScript?
    A. The name of the variable cannot use reserved words.
    B. Variable names are case insensitive.
    C. The first character of variable name cannot be a number.
    D. No length limitation but must fit one line.

14. JavaScript is a _____ scripting and supported by all major browsers.
    A. client-side
    B. server-side
    C. host-side
    D. user-side

15. _____ data type in JavaScript can be one or series of text and characters.
    A. Boolean
    B. String
    C. Number
    D. Set

16. Which of the following set the variable `result` to the value 25?
    A. `result = pow(5, 2);`
    B. `result = Math.pow(5, 2);`
    C. `result = sqrt(25);`
    D. `num = Math.sqrt(25);`

17. Which of the following is false about session in PHP?
    A. Session is a global variable stored on the server.
    B. Session will store a partial of the data on user's computer.
    C. Session values are automatically deleted when the browser is closed.
    D. Sessions have the capacity to store relatively large data compared to cookies.

18. Which of the following function is used to redirect a page?
    A. `redirect()`
    B. `header()`
    C. `reflect()`
    D. `direct()`

19. A session in PHP is started with the _____ function.
    A. `session_start()`
    B. `session_begin()`
    C. `session()`
    D. `session_open()`

20. Which of the following functions is used to perform a query against the database?
    A. `mysqli_query()`
    B. `mysqli_get_query()`
    C. `mysqli_send_query()`
    D. `mysqli_use_query()`

Continued...

SECTION B (80 Marks)

Instruction: *Answer **ALL** questions from this section in the Answer Booklet provided.*

Question 1 – HTML (20 Marks)

(a) Write the HTML codes for the table shown below. [10 marks]

- The table width is 750*px*.
- The image name is *IOT.png*.

SAMPLE OUTPUT

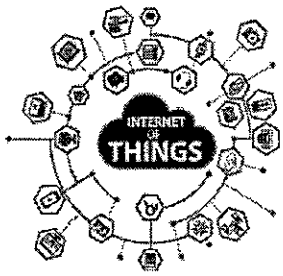
<table>
<tr><th colspan="3">IoT BootCamp</th><th rowspan="2">Program</th><td rowspan="5"> 
</td></tr>
<tr><th rowspan="2">Date</th><th colspan="2">Timetable</th></tr>
<tr><th>Start</th><th>Finish</th></tr>
<tr><td rowspan="2">12th Nov 2018</td><td rowspan="2">8 am</td><td rowspan="2">5 pm</td><td>Virtual Smart Phone</td></tr>
<tr><td>3D Human Sensing</td></tr>
<tr><td rowspan="2">1st Dec 2018</td><td>8 am</td><td>11 am</td><td rowspan="2">Raspberry Pi</td></tr>
<tr><td>11 am</td><td>2 pm</td></tr>
</table>

Figure 1: Sample output

(b) Write the HTML codes to produce the output as shown below. [10 marks]

SAMPLE OUTPUT

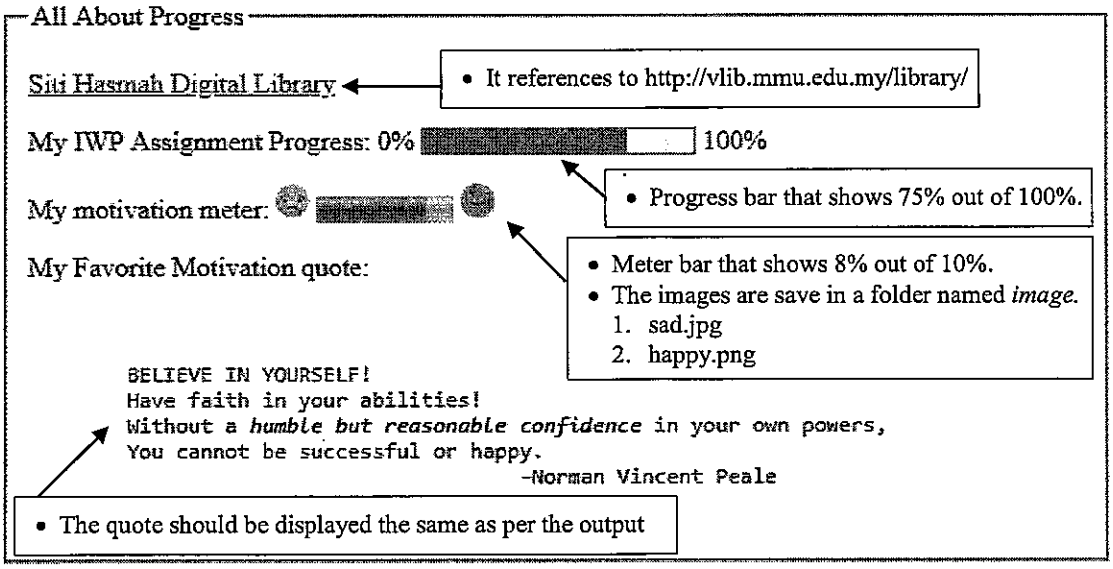

All About Progress
Siti Hasmah Digital Library
• It references to http://vlib.mmu.edu.my/library/
My IWP Assignment Progress: 0%
100%
• Progress bar that shows 75% out of 100%.
My motivation meter:
My Favorite Motivation quote:
• Meter bar that shows 8% out of 10%.
• The images are save in a folder named image.
1. sad.jpg
2. happy.png
BELIEVE IN YOURSELF!
Have faith in your abilities!
Without a humble but reasonable confidence in your own powers,
You cannot be successful or happy.
-Norman Vincent Peale
• The quote should be displayed the same as per the output

Figure 2: Sample output

Continued...

Question 2 – CSS (20 Marks)

(a) Write the External CSS codes based on the given HTML codes. [11 marks]

```
<div class="whole">
<h2>3 steps to create a website</h2>

<div class="s1-wrap">
<h3>Step #1</h3>
<p id="desc">Choose website building platform</p>
<p><img src="image/web_builder.png" width="150px" height="150px"></p>
</div>

<div class="s2-wrap">
<h3>Step #2</h3>
<p id="desc">Get a domain name and web hosting</p>
<p><img src="image/web_hosting.png" width="150px" height="110px"></p>
</div>

<div class="s3-wrap">
<h3>Step #3</h3>
<p id="desc">Set up, edit and customize website</p>
<p><img src="image/customize_web.png" width="150px" height="150px"></p>
</div>
</div>
```

Figure 3: HTML code snippet

- The *whole* box:
  - Set a background image *background.jpg* which is stored in a folder named *image*.
  - The width and height is 850px and 400px respectively.
  - The overflow is clipped, and the rest of the content will be invisible.

- Image inside the whole:
  - Set the image width and height to 150px.

- The *s1-wrap, s2-wrap & s3-wrap* box:
  - The width and height is 250px.
  - It has a white color border, it is solid and set the border width to 5px.
  - Has a rounded-edge border of 30px.
  - The boxes float to the left.
  - The text in the boxes are aligned center.
  - Have right and left margin of 10px.

- The heading level 2 title:
  - Uses Georgia font.
  - The font colour is *#BC8F8F*.
  - The text is aligned center.

- The paragraph with ID *desc*:
  - Uses Comic Sans MS font.
  - The text size is set to 15px.

Continued...

SAMPLE OUTPUT

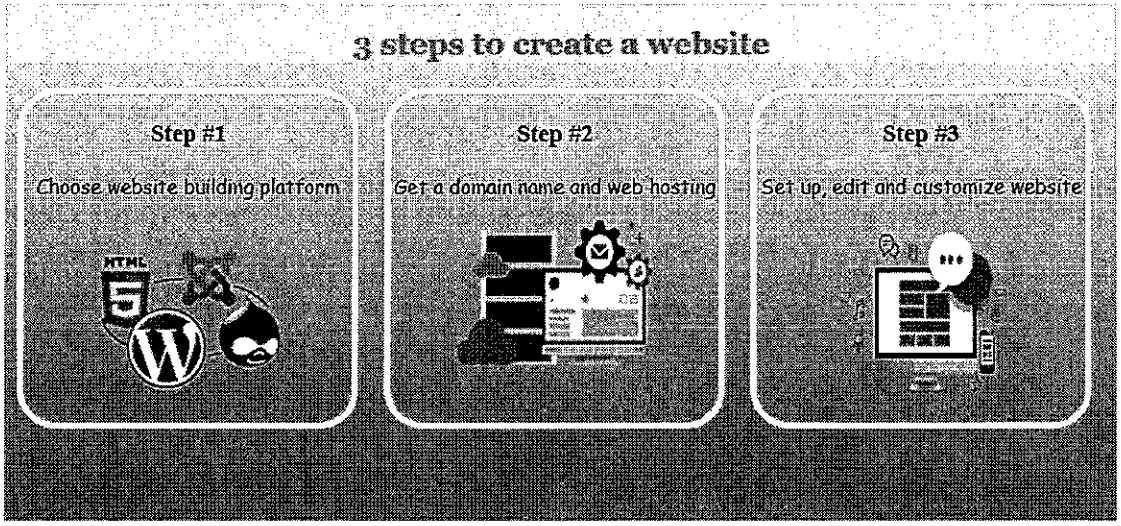

3 steps to create a website
Step #1
Choose website building platform
Step #2
Get a domain name and web hosting
Step #3
Set up, edit and customize website

Figure 4: Sample output

(b) Write the Internal CSS codes based on the given HTML codes. [9 marks]

```
<div class="main">
<h1>DENGUE <br/> SYMPTOMS</h1>
<div id="symp1">
      <p><img src="image/fever_chills.jpg" /><p>
      <p>High fever and chills</p>
</div>
<div id="symp2">
      <p><img src="image/severe_pain.jpg" /></p>
      <p>Severe pain <br /> (HEADACHES, EYE PAIN; BONE, JOINT, AND MUSCLE PAIN)</p>
</div>
<div id="symp3">
      <p><img src="image/RASH.jpg" /></p>
      <p>Rash on the amrs, legs, and torso with redness and swelling of the hands
and feet</p>
</div>
</div>
```

Figure 5: HTML code snippet

- The *main* box:
  - Has a width and height of 410px and 680px respectively.
  - The background color is *#F5DEB3*.
  - Has a rounded-edge of 20px.
- Heading level 1:
  - Text color is *DarkRed*.
  - Text is aligned center.
- `<div>` with ID *symp1, symp2, symp3*:
  - Width and height is 380px and 180px respectively.
  - Has a white groove border of size 5px.
  - Left and right margin in 10px.
  - Text is aligned to center.
  - Background color is RGB format with RED 237, GREEN 247 and BLUE 248.
  - Has a rounded-edge for top-left and bottom-right border edge.
- `<div>` with ID *symp1*:
  - Overwrite the earlier height with 150px.

Continued...

SAMPLE OUTPUT

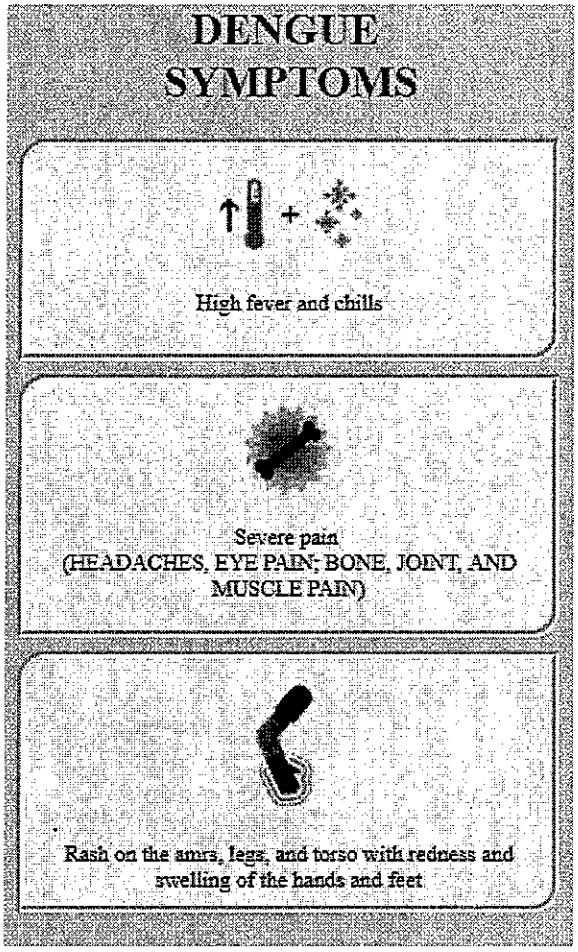

DENGUE
SYMPTOMS
High fever and chills
Severe pain
(HEADACHES, EYE PAIN; BONE, JOINT, AND
MUSCLE PAIN)
Rash on the arms, legs, and torso with redness and
swelling of the hands and feet

Figure 6: Sample output

Question 3 – JAVACSRIPT (20 Marks)

(a) Write the JavaScript codes for the *discount()* function that displays the amount to be paid for the training courses. [12 Marks]

- A form named "workshop" has the following elements.

```
<form name="workshop">
<p>Training Courses:
<br>
<input type="checkbox" name="course_name" value="HTML" onclick="discount()">Introduction
to HTML - RM500.00
<br><input type="checkbox" name="course_name" value="CSS" onclick="discount()">What's New
in CSS - RM600.00
<br><input type="checkbox" name="course_name" value="PHP" onclick="discount()">Advanced
PHP Programming - RM 800.00
</p>
<p>You are entitled for:  <b><span id="disc"> 0</span>% discount </b></p>
<p>Amount:<b><span id="before_disc"> RM0.00 </span></b> </p>
<p>Total amount after discount:<b><span id="after_disc"> RM0.00 </span></b> </p>
</form>
```

Figure 7: HTML code snippet

Continued...

- When checkbox is checked, *discount()* will be called.
- In function *discount()*:
    - Declare all the necessary variables.
    - Using a *for* loop:
        - Identify whether each checkbox is checked.
        - If the checkbox is checked, add the course's value into an array.
    - Using another *for* loop:
        - Use a *switch case* statement to get each course's value from the array and identify their fees.

Table 1: Course name and fees

Course	Fees (RM)
Introduction to HTML	500.00
What's New in CSS	600.00
Advanced PHP Programming	800.00

    - Use an *if else* statement to identify the discount rate based on the table below:

Table 2: Total fees and discount rate

Total Fees (RM)	Discount Rate
0-999	0%
1000 to less than 1500	5%
1500 and above	10%

    - Display the total fees, discount rate and fees after discount using inner HTML property as shown in the sample output.

SAMPLE OUTPUT

- If no training courses were chosen, the amount of fees and total amount are RM0.00.

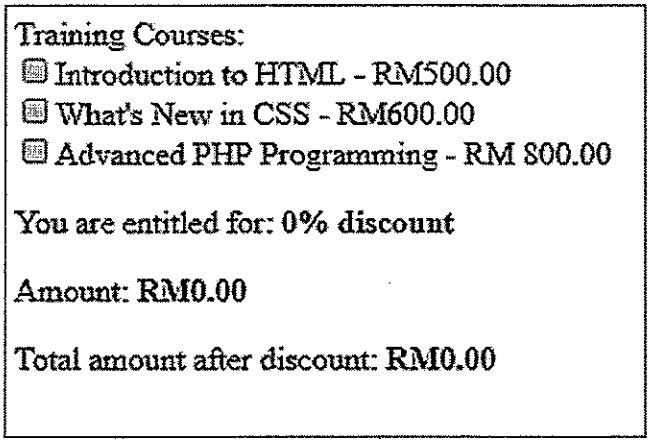

Training Courses:
Introduction to HTML - RM500.00
What's New in CSS - RM600.00
Advanced PHP Programming - RM 800.00
You are entitled for: 0% discount
Amount: RM0.00
Total amount after discount: RM0.00

Figure 8: Sample output if no training course were chosen

Continued...

- If the user chooses the training courses, the discount and the payment information will be displayed.

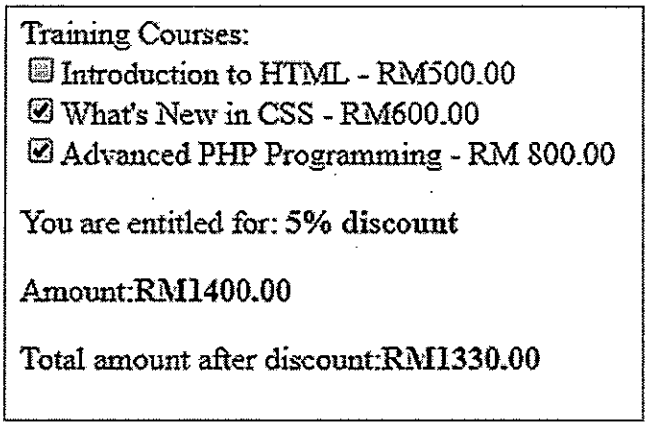

Training Courses:
Introduction to HTML - RM500.00
What's New in CSS - RM600.00
Advanced PHP Programming - RM 800.00
You are entitled for: 5% discount
Amount:RM1400.00
Total amount after discount:RM1330.00

Figure 9: Sample output if user chooses the training courses

- If the user unchecks the checkbox, the payment will be decreased.

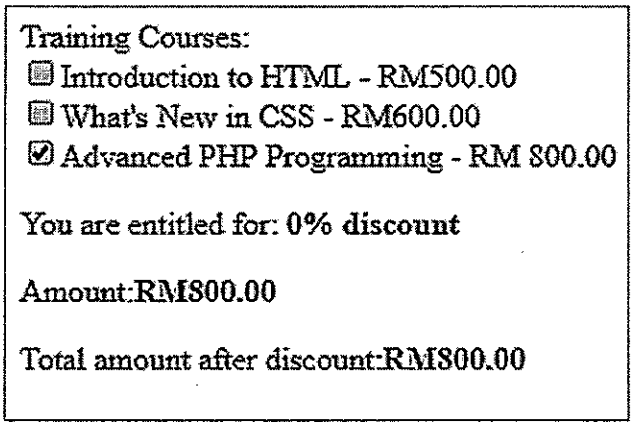

Training Courses:
Introduction to HTML - RM500.00
What's New in CSS - RM600.00
Advanced PHP Programming - RM 800.00
You are entitled for: 0% discount
Amount:RM800.00
Total amount after discount:RM800.00

Figure 10: Sample output if the user unchecks the checkbox

(b) Write the JavaScript codes based on the descriptions and outputs shown below. The program will collect four months of temperature in Kuala Lumpur and identify the maximum temperature among them. [8 Marks]

- In function *add():*
  - Declare all the variables in this function
  - Create an array called *temp*.
  - Use a *while* loop and prompt the user to enter four months temperature and store them in the *temp* array.
  - Use a *for* loop to identify the maximum temperature from the array.
  - Next, call function *display(...)* and pass the maximum temperature and *temp* array.
- In function *display(...)*
  - Declare all the variables in this function.
  - Using a *for* loop to display the *temp* array's content.
  - Display the value of maximum temperature.

Continued...

SAMPLE OUTPUT

- Ask the user enter temperature in Kuala Lumpur for four times using *while* loop.

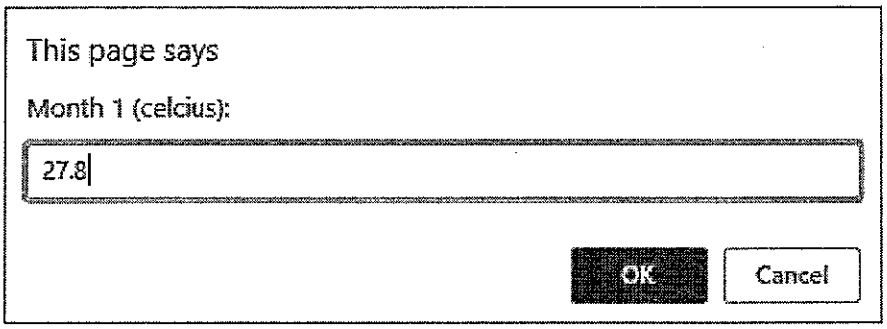


Figure 11: Sample output of asking user to enter temperature

- After user key in four months' temperature, the following output is displayed.

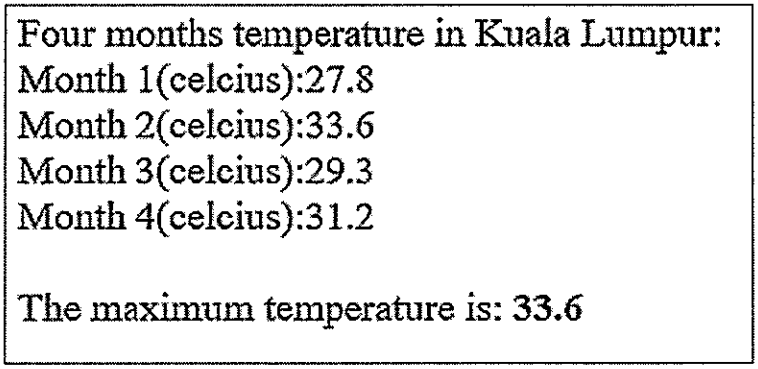


Figure 12: Sample output of displaying the maximum temperature

Question 4 – PHP (20 Marks)

ABC Bakery House requires a web-based cake ordering system to handle the daily ordering tasks. As a web developer, you need to develop a simple ordering system that enables the clients to make order and staffs to view all the orders. The tables shown below are tables in a database named *cakeorder*.

Table 3: orders

order_id	cake_name	cake_size	cake_caption	cake_num_candle	cust_id
1	Black Forest	0.5	Happy Birthday	1	1
2	Chocolate Lovers Cake	1	LOVE YOU, MOM	5	3
3	Minions Cake	2	Happy 1/2 Birthday	6	2

Continued...

Table 4: customer

cust_id	cust_name	cust_address
1	Mary Jane	No. 18, Jalan Hidup, Melaka.
2	Susan Boyle	12-7-4, Happy Garden, Melaka.
3	Siti	No. 4, Jalan PJ 4, KL.

(a) Create a PHP page named *connection.php* which makes a connection to the database and assign the connection to *$conn* variable, given the information below:

- Server name: localhost
- MySQL username: root
- MySQL password: " "
- Database name: cakeorder [2 marks]

(b) Given the output and sample code of page *order_page.php* below, create a complete PHP code for *add_cake.php* page where will insert the data retrieved from *order_page.php* into the database. [8 marks]

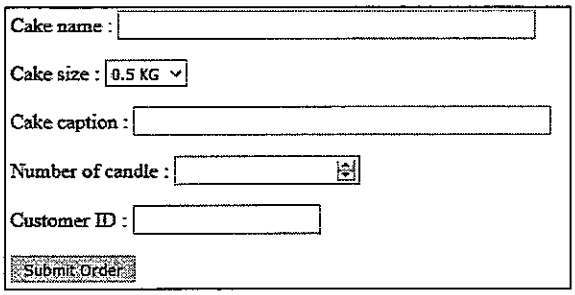


Figure 13: Sample output

```
<form method="post" action="add_cake.php">
        <p>Cake name : <input type="text" name="cake_name" size="50"></p>
        <p>Cake size : <select name="cake_size">
                <option value="0.5">0.5 KG</option>
                <option value="1.0">1.0 KG</option>
                <option value="2.0">2.0 KG</option>
                </select></p>
        <p>Cake caption : <input type="text" name="cake_caption" size="50"></p>
        <p>Number of candle : <input type="number" name="cake_candle"></p>
        <p>Customer ID : <input type="text" name="cust_id" ></p>
        <input type="submit" name="submit_order" value= "Submit Order">
</form>
```

Figure 14: HTML code snippet

Guides are given as below:

- Include the page *connection.php*
- Check if the customer ID exists in the database. If not exists, display "*Customer ID not found!*", otherwise, proceed with the insertion.
- After successfully insert the data into database, display "*Order added successfully!*" and a button displays "*Add Another Cake*" as shown below. When the user clicks on the button, directs to *order_page.php* page.

Continued...

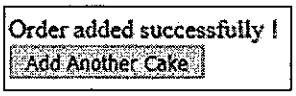


Figure 15: Sample output of successfully insert data into database

- If the insertion is failed, displays the MySQL error.

(c) Create a complete PHP code for *display_order.php* page which displays orders as shown below. [10 marks]

Order ID	Cake Name	Cake Size	Caption	No. Candle	Customer Name	Customer Address	EDIT
1	Black Forest	0.5 KG	Happy Birthday	1	Mary Jane	No. 18, Jalan Hidup, Melaka.	EDIT
2	Chocolate Lovers Cake	1 KG	LOVE YOU, MOM	5	Siti	No. 4, Jalan PJ 4, KL.	EDIT
3	Minions Cake	2 KG	Happy 1/2 Birthday	6	Susan Boyle	12-7-4, Happy Garden, Melaka.	EDIT
4	Coffee Almond Cake	1 KG	Happy teaching's Day 2018	1	Susan Boyle	12-7-4, Happy Garden, Melaka.	EDIT

Figure 16: Sample output

Guides are given as below:

- Include the page *connection.php*
- The data is retrieved from both tables.
- If no records are found, display "*No orders were found!*".
- The EDIT hyperlink of each record links to *edit_order.php* page by passing the order's ID through the URL.

End of Page.